

ABSTRACT OF THE DISCLOSURE

A preassembled flow control unit includes a plenum, a flow controller mounted to the plenum, and a flow control sensor mounted to the plenum. An isolation valve selectively blocks the flow of air between the plenum and the flow controller. An optional thermal coil is also mounted to the plenum to control the temperature of air flowing therethrough. In a particular embodiment, the thermal coil is mounted to an open end of the plenum opposite the flow controller, and the fluid lines serving the thermal coil are also mounted to the plenum, with an automatic valve in at least one of the fluid lines. An optional protective bracket protects the automatic valve from incidental damage during transportation and installation of the flow control unit. An electrical disconnect and a power converter are also mounted on the plenum. The power converter receives electrical power from the disconnect, converts a first voltage from the disconnect to a second lower voltage, and provides the second voltage to the flow controller and/or the automatic valve. Preassembly of the flow control unit facilitates pretesting and/or precertification of the flow control unit, and provides for easier installation.

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